

ABSTRACT OF THE DISCLOSURE

An improved multi-layered diagnostic sanitary test strip for receiving a heterogenous fluid, such as whole blood, to test for presence and/or amount of a suspected analyte in the fluid by facilitating a color change in the strip corresponding to the amount of the analyte in the fluid, wherein the test strip includes fluid volume control dams to prevent spillage of the fluid from the strip and a chemical reagent solution that facilitates end-point testing. The improved test strip comprises (a) an upper support strip having a fluid receiving port and (b) a lower support strip having a color change viewing port and securely sandwiched therebetween (c) a spreading mesh screen for uniformly distributing the fluid, (d) a chemically treated separating layer for removing an undesirable element, e.g. red blood cells, from the fluid received from the mesh screen, (e) an isotropic membrane chemically treated with a reagent indicator solution for removing any remaining portions of the undesirable element, producing a color change proportionate to the amount of the suspected analyte in the fluid and facilitating an end-point ramp test, and (f) volume control dam partitions for retaining fluid on and in the strip.